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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/076,795	02/12/2002	David A. Norman	50097-8USPT	3663

26231 7590 09/20/2004

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EXAMINER


AVERY, BRIDGET D

ART UNIT	PAPER NUMBER
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3618

DATE MAILED: 09/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/076,795	Applicant(s) NORMAN ET AL. 	
	Examiner Bridget Avery	Art Unit 3618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 May 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13, 41 and 46-59 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13, 41 and 46-59 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The amendment filed on May 7, 2004 is acknowledged and has been entered.
2. This action includes a new grounds of rejection based on a newly discovered prior art reference. The examiner regrets any inconvenience caused by the discovery.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-9, 11-13, 41-52 and 54-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kondo (US Patent 6,287,167) in view of Porter et al. (US Patent 5,056,613).

Kondo teaches a method for controlling acceleration of a toy vehicle configured to be operated by a person, the method old and well-known method comprising: a processor (10) for receiving a throttle signal (taught in column 1, lines 5-8) operable to induce motion via a motor (16) operating as a drive mechanism of the toy vehicle; generating a transition signal (pulse signal as taught in column 1, line 40) based on the throttle signal; and applying the transition signal (pulse signal) to affect operation of the motor (16). The transition signal is a pulse width modulation signal. The pulse width modulation ranges from approximately a 20 percent to approximately a 100 percent

Art Unit: 3618

duty cycle, as taught in column 3, lines 24-48. The motor (16) includes a high and low terminal, the transition signal being applied to the low terminal of the motor (16), as taught in column 4, lines 60-67.

Kondo lacks the teaching of transitioning the motor from a first to a second angular velocity.

Porter et al. teaches the operation of transitioning the motor from a first to a second angular velocity. The transition from the first to second angular velocity is non-linear or substantially linear. The transition signal ramps power to the motor. Porter et al. further teaches a vehicle with signals received from an operator in physical contact with the vehicle.

Based on the teachings of Porter et al., it would have been obvious to one having ordinary skill in the art, at the time the invention was made, to modify the system of Kondo to include the operation of transitioning the motor from a first to a second angular velocity to regulate the motor based on demand to prevent overrunning. With respect to claims 11-13, the system taught by the combination is capable of forming a second transition signal, upon the throttle signal being transitioned, to be utilized upon the throttle being re-transitioned over a predetermined time duration; and is capable of initiating, upon the throttle signal being re-transitioned before expiration of the predetermined time duration, the transition signal at a level associated with the second transition signal. It would have been obvious to one having ordinary skill in the art, at the time the invention was made to add the system and taught by the combination of Kondo and Porter et al. to effectively match actual motor speed to the desired motor

Art Unit: 3618

speed. The provision of transitioning over a time span of at least one second would have been obvious to one having ordinary skill in the art, at the time the invention was made, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. See *In re Aller*, 105 USPQ 233.

4. Claims 10 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kondo ('167) and Porter et al. ('613) as applied to claim 1 above, and further in view of Ishizuka et al. (US Patent 5,762,532).

The combination of Kondo and Porter et al. teach the features described above.

The combination of Kondo and Porter et al. lack the teaching of a delay.

Ishizuka et al. teaches delay circuits.

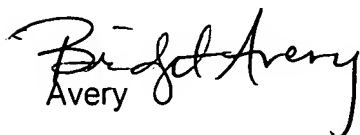
Based on the teachings of Ishizuka et al., it would have been obvious to one having ordinary skill in the art, at the time the invention was made, to modify the combination of Kondo and Porter et al. to include a delay circuit associated with the shift signal to prevent any damage of the system due to rapid change in the direction of motion.

Conclusion

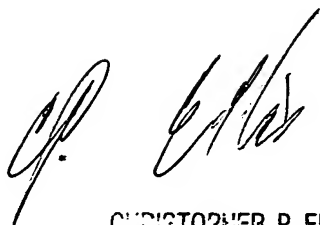
5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Mezzatesta, Jr. et al. shows a control system for regulating motor speed.

6. Any inquiry concerning this communication should be directed to Bridget Avery at telephone number 703-308-2086.


Avery

September 14, 2004



CHRISTOPHER P. ELLIS
SENIOR PATENT EXAMINER
TECHNOLOGY CENTER 3600